

REMARKS

Reconsideration of the application is requested.

Claims 1-16 remain in the application. Claims 1-16 are subject to examination.

Claims 1-16 have been amended.

Claims 1, 9, and 10 have been amended to better define the invention.

Support for the changes can be found, for example, by referring to Fig. 2 and to page 7, lines 18-21 and page 9, line 17 through page 11, line 6 of the specification.

Claims 1 - 16 are now directed towards a hub comprising a data ring including two disconnectable nodes, a monitoring apparatus and an additional node.

Claims 1, 9 and 10 have also been amended to specify that the at least two disconnectable nodes pass data traffic in the data ring in a data traffic direction.

Support for this feature can be found, for example, by again referring to Fig. 2 and to page 7, lines 18-21 of the specification. Claims 1, 9 and 10 now also specify that the monitoring apparatus is connected to each one of the at least two disconnectable nodes of the data ring. Support for this change can be found in Figure 2, for example. Claims 1, 9 and 10 also now specify that the additional node is different from the at least two disconnectable nodes arranged in the data ring and that the fault state is produced by feeding a faulty signal into the data ring in the direction of the data traffic in order to activate a loop initialization procedure. Support for this change can be found by referring to

page 10, line 7 through page 11, line 6 of the specification.

In response to the Examiner's comments in item 4 on page 2 of the Office action, applicants note that the features upon which the previous argument was based are now included in amended claims 1, 9 and 10. Applicants therefore ask that the Examiner reconsider the arguments provided in the last amendment.

Under the heading "Claim Rejections – 35 USC § 102" on page 4 of the above-identified Office Action, claims 1-3, 5-10, and 12-16 have been rejected as being fully anticipated by U.S. Patent No. 4,887,256 to Nakayashiki et al. under 35 U.S.C. § 102.

Nakayashiki et al. do not disclose a hub that includes all features of claims 1 or 10 or of the hub that is provided in claim 9. The network system described by Nakayashiki et al. does not comprise a monitoring apparatus for monitoring and driving at least two disconnectable nodes, the monitoring apparatus being connected to each one of the at least two disconnectable nodes of a data ring.

In fact, Nakayashiki et al. actually teach away from providing a monitoring apparatus for monitoring and driving a multiplicity of nodes in which the monitoring apparatus is connected to each one of the nodes (see column 2, lines 48 to 50). According to the teaching in Nakayashiki et al., all control logic is included in the individual stations. There is no (central) monitoring apparatus

connected to each one of the disconnectable nodes (See column 2, lines 50 to 52).

Nakayashiki et al. teach that a failure is deliberately created. However, according to Nakayashiki et al., the failure is created by one of the nodes for connecting appliances (See the abstract and column 2, lines 40 to 44). Furthermore, the failure created by Nakayashiki et al. is not created in the (first) ring, in which a failure occurred, but in another (second) ring (See column 2, lines 16 to 22 and 40 to 44). Furthermore, the failure signal is sent in the second ring in the opposite direction with respect to the direction of the data flow of the first ring (See column 3, lines 12 to 16).

In contrast, claims 1, 9 and 10 in slightly different language each specify that a faulty signal is fed into the data ring in the direction of the data traffic in order to activate a loop initialization procedure

Nakayashiki et al. do not teach or suggest producing a fault state deliberately in the disconnectable nodes by feeding a faulty signal into the (first) data ring in the direction of the data traffic in order to activate a loop initialization procedure.

The invention, as defined by claims 1, 9 and 10, is not anticipated by Nakayashiki et al.

With regard to claim 8, Nakayashiki et al. do not disclose that a monitoring

apparatus holds said disconnectable nodes in the data ring during the production of the data ring fault in said disconnectable nodes

By piecing together subject matter from a multiplicity of different text passages, figures and embodiments, the Examiner has tried to read features into the prior art, which are in fact not disclosed and which would contradict the teaching of the prior art document taken as a whole. With regard to claim 8, for example, the Examiner has referred to no less than six different passages of the description spread over columns 2, 4 and 7. Furthermore, reference is made to Figures 1, 2, 3a, 3b, 3c 3d, 4, and 14.

Most evidently, the quoted passage in column 2, lines 40 to 47 that [a station] "informs upstream stations ... by the false failure" does not disclose, imply or suggest that disconnectable nodes are held in the data ring.

First, the Examiner did not repeating the complete passage, which clearly states that **"If the data transmission directions on dual ring transmission lines are opposite to each other, it is possible to inform upstream stations in one ring of the abnormality by the false failure caused in the other ring"** (emphasis added by the applicant). *There is no statement derivable from that passage with respect to the first ring*, in which a failure occurred and in which disconnectable nodes are held as defined by claim 8. Claim 8 only refers to a single data ring and is thus technically different from the dual ring disclosed by Nakayashiki et al.

Furthermore the statement merely discloses that, *in theory*, stations can be informed by creating a deliberate failure. *In practice*, however, that is exactly what is to be avoided according to Nakayashiki. As explained a bit further down, in column 3, lines 7 - 9 and 17 - 20 “stations located downstream side of that station which has detected abnormality do not detect the abnormality in the above described physical signal. [...], only the station located immediately downstream in the second ring detects abnormality of the physical signal” (emphasis added by applicants).

There is in fact no basis for the allegation of the Examiner that the citation quoted above would convey the feature that “nodes are still in the ring” and even less so, that nodes still in the ring are actively held there as specified by claim 8. To the contrary, column 3, lines 60 - 62 confirm that a closed ring is only formed after reconfiguration has been completed, which, according to Nakayashiki, comprises most of the steps cited by the Examiner.

Under the heading “Claim Rejections – 35 USC § 103” on page 14 of the above-identified Office Action, claims 1-3 and 5-7 have been rejected as being obvious over U.S. Patent No. 5,508,998 to Sha et al. in view of U.S. Patent No. 4,887,256 to Nakayashiki et al. and further in view of the background of U.S. Patent No. 5,508,998 to Sha et al. under 35 U.S.C. § 103.

Applicants maintain their view that one of ordinary skill in the art could not and,

therefore, would not combine the teachings of Nakayashiki et al. and Sha et al. Nakayashiki et al. specifically teach that it is not advisable to use a special station, such as a master station (See column 2, lines 48 to 52). Sha et al. teach providing a process running on an agent that is remote from (separate from) a beaconing token ring network (See the abstract). The teachings of Nakayashiki et al. and Sha et al. are *inherently incompatible*. Please See MPEP 2145 X (Arguing Improper Rationales For Combining References) Section D 2 - References Cannot Be Combined Where Reference Teaches Away from Their Combination.

Even if one of ordinary skill in the art were to try to combine the teachings of Sha et al. and Nakayashiki et al. for some reason, the invention as defined by claim 1 would not have been obtained for the reasons given above with regard to the deficiencies in the teaching of Nakayashiki et al. Sha et al. do not teach the features that are lacking in Nakayashiki et al.

First, Sha et al. do not disclose a monitoring apparatus for monitoring and driving said at least two disconnectable nodes, the monitoring apparatus being connected to each one of the at least two disconnectable nodes of the data ring. According to Sha et al., a network management module (MMM) 15 is connected remotely to a single probe station 34 (See column 6, line 65 to column 7, line 3). The network management module (MMM) 15 is not connected to anyone of the (ordinary) disconnectable nodes.

Second, in contrast to the invention as defined by claim 1 and as already acknowledged by the Examiner, Sha et al. do not disclose or suggest adding an additional node that is different from at least two disconnectable nodes and that is connected to a monitoring apparatus. Also in contrast to the invention as defined by claim 1, Sha et al. also do not disclose or suggest that an additional node allows a fault state to be produced deliberately in said disconnectable nodes by feeding a faulty signal into the data ring in the direction of the data traffic in order to activate a loop initialization process.

Instead, Sha et al. teach using a periodic task that checks a beacon frame counter and a good frame counter (See Fig. 5 and column 9, lines 1 to 9). This, however, is not the inventive solution specified in claim 1.

Consequently, the invention as defined by claim 1 is not obvious over the teaching in Nakayashiki et al. in view of that in Sha et al.

Additionally, Sha et al. disclose a network process that automatically identifies and isolates faulty stations or a group of stations within a token ring communication network by a process running on an agent that is remote from the beaconing token ring network. Beacon frame counters and good frame counters are maintained by a probe station within the token ring network which provides the counter information to an agent running at a remote location. The remote agent detects a beaconing station in the network by either an incrementing of the beacon frame counter or a failure to increment the good

frame counter within predetermined amounts of time. Once a token ring network segment is determined to be beaconing, an iterative process proceeds through the token ring with commands sent from the remotely operating agent. Stations on the network are iteratively wrapped and unwrapped until the beaconing stations can be determined and isolated from the network (abstract).

Sha et al. do not disclose a monitoring apparatus for monitoring and driving said at least two disconnectable nodes; the monitoring apparatus being connected to each one of the at least two disconnectable nodes of the data ring. According to Sha et al., a network management module (MMM) 15 is connected remotely to a single probe station 34 (column 6, line 65 to column 7, lines 3).

Furthermore and as already acknowledged by the Examiner, Sha et al. do not disclose an additional node different from at least two disconnectable nodes, that is connected to a monitoring apparatus, and that allows a fault state to be produced deliberately in said disconnectable nodes by feeding a faulty signal into the data ring in the direction of the data traffic in order to activate a loop initialization process.

Nakayashiki et al. do not disclose or even suggest the features missing from the disclosure of Sha et al. In particular Nakayashiki et al. teach away from adding a monitoring apparatus, connected to each one of the disconnectable nodes. Nakayashiki et al. also do not teach adding an additional node different

from at least two disconnectable nodes, that is connected to a monitoring apparatus, and that allows a fault state to be produced deliberately in said disconnectable nodes by feeding a faulty signal into the data ring in the direction of the data traffic in order to activate a loop initialization process.

Instead, Nakayashiki et al. teach equipping all stations with identical logic (See column 2, lines 50 - 52) and using a second data ring for signaling (See column 3, lines 12 to 17). This again differs from the invention as defined by claim 1.

Consequently, the invention as defined by claim 1 is not taught or suggested by Sha et al. in view of Nakayashiki et al.

Under the heading "Claim Rejections – 35 USC § 103" on page 18 of the above-identified Office Action, claim 4 has been rejected as being obvious over U.S. Patent No. 5,508,998 to Sha et al. in view of U.S. Patent No. 4,887,256 to Nakayashiki et al. and further in view of U.S. Patent No. 6,574,192 to Egnell under 35 U.S.C. § 103.

Claim 4 is not obvious over the cited references for the reasons given above with regard to claim 1 and the deficiencies in the teachings of Sha et al. and Nakayashiki et al.

Under the heading "Claim Rejections – 35 USC § 103" on page 18 of the above-identified Office Action, claim 11 has been rejected as being obvious

over U.S. Patent No. 4,887,256 to Nakayashiki et al. and further in view of U.S. Patent No. 6,574,192 to Egnell under 35 U.S.C. § 103.

Claim 11 is not obvious over the cited references for the reasons given above with regard to claim 10 and the deficiencies in the teachings of Sha et al. and Nakayashiki et al.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1, 9, or 10. Claims 1, 9, and 10, are therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on one of those independent claims.

In view of the foregoing, reconsideration and allowance of claims 1-16 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Sterner LLP, No. 12-1099.

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Respectfully submitted,

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